

NGBS GREEN CASE STUDY

Calle Ventoso



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About the Project

Project Type: Single-family new construction

Home Size: 4,758 sq. ft.

Location: Santa Fe, NM

Performance: NGBS Green Certification – Emerald level, [Water Rating Index Certification](#) – WRI 34 (03/2023)

Project Team

Builder: Ventoso Home LLC

Verifier: Laureen Blissard, [LTLBenviroecture](#)

Rating/Verification Company: Stephen Onstad, [EverGreen Building Solutions](#)

Sustainability Contractor: Kim Shanahan, Shanahan & Associates LLC

Water Conservation Specialist: Doug Pushard, [HarvestH2O](#)

Overview

A collaborative effort between owner, builder, and sustainability contractor, this home was the culmination of lessons learned by the homeowners from the previous properties bought, constructed, or renovated. Early in the planning and design phase, the team collaborated on ways to optimize the home, marrying the aesthetic the owners desired with the sustainability and performance they did not want to sacrifice. The stunning result is an eloquently-designed home so performance-driven that it earned Emerald level NGBS Green Certification and a Water Rating Index (WRI) certification of 34. This home uses nearly 70% less water than similar properties and also received the New Mexico Sustainable Housing credit and the federal solar tax credit.



Green Features/Practices

- Microinverter photovoltaic (PV) panels, providing 10,440 gigawatts (GW)
- No- to low-toxicity cabinetry and furniture
- Electric vehicle (EV) charging station
- Passive radon system and Energy Recovery Ventilator (ERV)
- Walls insulated with 4-6" of foam and sealed with NGBS Green Certified [AeroBarrier](#) – achieves a very tight building envelope
- Ductwork sealed with NGBS Green Certified [Aeroseal](#) to combat leaks
- Native vegetation that requires little irrigation
- Applied stucco and non-vented attic to reduce risk of fire
- Fenced and tightly-controlled construction site
- Radiant floor heating (RFH)
- Achieved multiple certifications, to include:
 - ◆ Water Efficiency Rating (WERS) of 13
 - ◆ Indoor airPLUS
 - ◆ WaterSense
 - ◆ New Mexico Certified Wildlife Habitat
 - ◆ Home Energy Rating System (HERS) score of -11 score
 - ◆ ENERGY STAR

A Better Place To Call Home

WRI Spotlight. Not only was this the first NGBS Green WRI Certified home, it offered a unique opportunity to compare the many different water certification programs since so many were pursued. We are very grateful to Laureen Blissard, the Verifier of record who offered her insight on the WRI, WERS and HERSH2O certification processes.

From the Home Owners

"Working with all the experts allowed us to preserve the majestic scenery outdoors and maximize the home's performance without sacrificing the modern style that we wanted. Surrounded by Santa Fe style houses, our home is a breath of fresh air in more ways than one! When visitors comment on the open plan, floor-to-ceiling windows, and sophisticated furniture, it is easy for them to doubt the boasted energy and water achievements, but the owners can honestly say 'The truth exists behind the walls.'"

- Ellen Libert, Homeowner

From the Water Specialist

"Because water was a focus immediately, that made the (WRI) score possible. Coming in late does not work, such as when operating under heavy design constraints or after walls are already constructed. Having the whole team already focused on water in the design phase was one of the biggest wins of the project."

- Doug Pushard, HarvestH2O

About Calle Ventoso

The property boasts WRI, HERSH2O, WaterSense, and WERS certifications/ratings. It employs a 12,500-gallon cistern for water collection and reuse system with the graywater reuse system supplied by Resource Conservation Technologies and is additionally equipped with Phyn smart water meters for digital and real-time feedback delivered straight to the owners' phones. The technology and innovation are so expansive that the control room is the size of a studio apartment, complete with its own air conditioning. The system captures and filters water year-round and accommodates occasional freezing temperatures. Another unique feature is that the system can be fully inspected in the water closet because all water (i.e., city, rainwater, and graywater) cycles through the home before being distributed.

The Verifier Voice

*"The team found that the WRI certification process was very straightforward. The rating calculation was comparable to HERSH2O, although HERSH2O does not consider water recycling. While WRI covers water capture and reuse, the WERS certification goes into greater detail as to the multiple types of reusable water which explains the delta between the two scores (WRI 34 vs. WERS 13)..."**The old phrase, 'if you are not keeping score, it doesn't count' applies to this project more than any in which I've been involved. I am grateful to have had the opportunity to be a part of a project with multiple certifications achieved at the highest levels available, which is very unusual. The information gathered across the different certifications has been invaluable for future certification approaches."*

- Laureen Blissard, NGBS Green Verifier,
LTLBenviroecture

